

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for producing laser radiation having a wavelength of about $2\mu\text{m}$, the device comprising:

a Tm:YAG sample; and

B1 a source of pumping radiation having a wavelength of about $1\mu\text{m}$, the source of pumping radiation comprising a resonant cavity ~~composed of a Nd:YAG sample and that includes~~ a first pair of members that are substantially reflective to radiation having a wavelength of about $1\mu\text{m}$, ~~and a the pumped Nd:YAG sample being substantially interposed between the first pair of members,~~

the resonant cavity ~~also~~ having the Tm:YAG sample located ~~substantially therein between~~ the first pair of members, and the source being arranged so that at least some of the radiation produced ~~by the source thereby~~ is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about $2\mu\text{m}$.

2. (canceled)

3. (canceled)

4. (canceled)

5. (previously presented) A device according to Claim 1, comprising a source of pumping radiation for the Nd:YAG sample to stimulate the Nd:YAG sample to emit radiation having a wavelength of about $1\mu\text{m}$.

6. (original) A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

7. (original) A device according to Claim 5, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

8. (currently amended) A device according to Claim 1, wherein the Tm:YAG sample is ~~substantially interposed between a second pair of members~~, at least one of which is substantially reflective to radiation having a wavelength of about $2\mu\text{m}$.

9. (currently amended) A device according to Claim 8, wherein the second pair of members is located ~~substantially~~ within the resonant cavity.

10. (original) A device according to Claim 1, wherein the device produces laser radiation having a wavelength of substantially $2.02\mu\text{m}$.

11. (original) A device according to Claim 1, wherein the source of radiation having a wavelength of about $1\mu\text{m}$ is a source of radiation having a wavelength of substantially $1.064\mu\text{m}$.

12. (currently amended) A method of producing laser radiation having a wavelength of about $2\mu\text{m}$, the method comprising the steps of:

providing a Tm:YAG sample;

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providing a resonant cavity that includes, ~~the resonant cavity being composed of a Nd:YAG sample and a first pair of members that are substantially reflective to radiation having a wavelength of about $1\mu\text{m}$, and a the Nd:YAG sample being substantially interposed between the first pair of members;~~

locating the Tm:YAG sample ~~substantially~~ within the resonant cavity between the first pair of members; and

pumping the Nd:YAG sample for emitting ~~pumping~~ radiation having a wavelength of about $1\mu\text{m}$ within the resonant cavity so that at least some of the radiation having a wavelength of about $1\mu\text{m}$ is absorbed by the Tm:YAG sample, causing the Tm:YAG sample to emit radiation having a wavelength of about $2\mu\text{m}$.

✓ 13. (canceled)

✓ 14. (canceled)

✓ 15. (canceled)

16. (previously presented) A method according to Claim 12, comprising the steps of:
providing a source of pumping radiation for the Nd:YAG sample; and
stimulating the Nd:YAG sample with the pumping radiation to cause the Nd:YAG sample to emit radiation having a wavelength of about $1\mu\text{m}$.

17. (original) A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of arrays of laser diodes.

18. (original) A method according to Claim 16, wherein the source of pumping radiation for the Nd:YAG sample comprises a plurality of flashlamps.

19. (currently amended) A method according to Claim 12, further comprising the steps of: providing a second pair of members, at least one of which is substantially reflective to radiation having a wavelength of about $2\mu\text{m}$; and interposing the Tm:YAG sample ~~substantially~~ between the second pair of members.

B / 20. (currently amended) A method according to Claim 19, further comprising the step of locating the second pair of members ~~substantially~~ within the resonant cavity.

cut. 21. (original) A method according to Claim 12, wherein the method produces laser radiation having wavelength of substantially $2.02\mu\text{m}$.

22. (currently amended) A method according to Claim 12, wherein the step of emitting pumping radiation having a wavelength of about $1\mu\text{m}$ comprises the step of emitting pumping radiation having a wavelength of substantially $1.064\mu\text{m}$.
